

instruments, and lights, but does not include occasional intermittent loads.

[Doc. No. 16097, 43 FR 46783, Oct. 10, 1978, as amended by Amdt. 135-70, 62 FR 42374, Aug. 6, 1997; Amdt. 135-72, 63 FR 25573, May 8, 1998]

**§ 135.165 Radio and navigational equipment: Extended overwater or IFR operations.**

(a) No person may operate a turbojet airplane having a passenger seating configuration, excluding any pilot seat, of 10 seats or more, or a multiengine airplane in a commuter operation, as defined in part 119 of this chapter, under IFR or in extended overwater operations unless it has at least the following radio communication and navigational equipment appropriate to the facilities to be used which are capable of transmitting to, and receiving from, at any place on the route to be flown, at least one ground facility:

(1) Two transmitters, (2) two microphones, (3) two headsets or one headset and one speaker, (4) a marker beacon receiver, (5) two independent receivers for navigation, and (6) two independent receivers for communications.

(b) No person may operate an aircraft other than that specified in paragraph (a) of this section, under IFR or in extended overwater operations unless it has at least the following radio communication and navigational equipment appropriate to the facilities to be used and which are capable of transmitting to, and receiving from, at any place on the route, at least one ground facility:

(1) A transmitter, (2) two microphones, (3) two headsets or one headset and one speaker, (4) a marker beacon receiver, (5) two independent receivers for navigation, (6) two independent receivers for communications, and (7) for extended overwater operations only, an additional transmitter.

(c) For the purpose of paragraphs (a)(5), (a)(6), (b)(5), and (b)(6) of this section, a receiver is independent if the function of any part of it does not depend on the functioning of any part of another receiver. However, a receiver that can receive both communications and navigational signals may be used in place of a separate communications receiver and a separate navigational signal receiver.

(d) Notwithstanding the requirements of paragraphs (a) and (b) of this section, installation and use of a single long-range navigation system and a single long-range communication system, for extended overwater operations, may be authorized by the Administrator and approved in the certificate holder's operations specifications. The following are among the operational factors the Administrator may consider in granting an authorization:

(1) The ability of the flightcrew to reliably fix the position of the airplane within the degree of accuracy required by ATC,

(2) The length of the route being flown, and

(3) The duration of the very high frequency communications gap.

[Doc. No. 16097, 43 FR 46783, Oct. 10, 1978, as amended by Amdt. 135-58, 60 FR 65939, Dec. 20, 1995; Amdt. 135-61, 61 FR 7191, Feb. 26, 1996]

**§ 135.167 Emergency equipment: Extended overwater operations.**

(a) Except where the Administrator, by amending the operations specifications of the certificate holder, requires the carriage of all or any specific items of the equipment listed below for any overwater operation, or, upon application of the certificate holder, the Administrator allows deviation for a particular extended overwater operation, no person may operate an aircraft in extended overwater operations unless it carries, installed in conspicuously marked locations easily accessible to the occupants if a ditching occurs, the following equipment:

(1) An approved life preserver equipped with an approved survivor locator light for each occupant of the aircraft. The life preserver must be easily accessible to each seated occupant.

(2) Enough approved liferafts of a rated capacity and buoyancy to accommodate the occupants of the aircraft.

(b) Each liferaft required by paragraph (a) of this section must be equipped with or contain at least the following:

(1) One approved survivor locator light.

(2) One approved pyrotechnic signaling device.

(3) Either—

- (i) One survival kit, appropriately equipped for the route to be flown; or
  - (ii) One canopy (for sail, sunshade, or rain catcher);
  - (iii) One radar reflector;
  - (iv) One liferaft repair kit;
  - (v) One bailing bucket;
  - (vi) One signaling mirror;
  - (vii) One police whistle;
  - (viii) One raft knife;
  - (ix) One CO<sub>2</sub> bottle for emergency inflation;
  - (x) One inflation pump;
  - (xi) Two oars;
  - (xii) One 75-foot retaining line;
  - (xiii) One magnetic compass;
  - (xiv) One dye marker;
  - (xv) One flashlight having at least two size "D" cells or equivalent;
  - (xvi) A 2-day supply of emergency food rations supplying at least 1,000 calories per day for each person;
  - (xvii) For each two persons the raft is rated to carry, two pints of water or one sea water desalting kit;
  - (xviii) One fishing kit; and
  - (xix) One book on survival appropriate for the area in which the aircraft is operated.
- (c) No person may operate an airplane in extended overwater operations unless there is attached to one of the life rafts required by paragraph (a) of this section, an approved survival type emergency locator transmitter. Batteries used in this transmitter must be replaced (or recharged, if the batteries are rechargeable) when the transmitter has been in use for more than 1 cumulative hour, or, when 50 percent of their useful life (or for rechargeable batteries, 50 percent of their useful life of charge) has expired, as established by the transmitter manufacturer under its approval. The new expiration date for replacing (or recharging) the battery must be legibly marked on the outside of the transmitter. The battery useful life (or useful life of charge) requirements of this paragraph do not apply to batteries (such as water-activated batteries) that are essentially unaffected during probable storage intervals.

[Doc. No. 16097, 43 FR 46783, Oct. 10, 1978, as amended by Amdt. 135–4, 45 FR 38348, June 30, 1980; Amdt. 135–20, 51 FR 40710, Nov. 7, 1986; Amdt. 135–49, 59 FR 32058, June 21, 1994; Amdt. 135–91, 68 FR 54586, Sept. 17, 2003]

**§ 135.168 [Reserved]**

**§ 135.169 Additional airworthiness requirements.**

(a) Except for commuter category airplanes, no person may operate a large airplane unless it meets the additional airworthiness requirements of §§121.213 through 121.283 and 121.307 of this chapter.

(b) No person may operate a reciprocating-engine or turbopropeller-powered small airplane that has a passenger seating configuration, excluding pilot seats, of 10 seats or more unless it is type certificated—

- (1) In the transport category;
- (2) Before July 1, 1970, in the normal category and meets special conditions issued by the Administrator for airplanes intended for use in operations under this part;
- (3) Before July 19, 1970, in the normal category and meets the additional airworthiness standards in Special Federal Aviation Regulation No. 23;
- (4) In the normal category and meets the additional airworthiness standards in appendix A;
- (5) In the normal category and complies with section 1.(a) of Special Federal Aviation Regulation No. 41;
- (6) In the normal category and complies with section 1.(b) of Special Federal Aviation Regulation No. 41; or
- (7) In the commuter category.

(c) No person may operate a small airplane with a passenger seating configuration, excluding any pilot seat, of 10 seats or more, with a seating configuration greater than the maximum seating configuration used in that type airplane in operations under this part before August 19, 1977. This paragraph does not apply to—

- (1) An airplane that is type certificated in the transport category; or
- (2) An airplane that complies with—
  - (i) Appendix A of this part provided that its passenger seating configuration, excluding pilot seats, does not exceed 19 seats; or
  - (ii) Special Federal Aviation Regulation No. 41.
- (d) Cargo or baggage compartments:
  - (1) After March 20, 1991, each Class C or D compartment, as defined in §25.857 of part 25 of this chapter, greater than 200 cubic feet in volume in a transport